POST Error Reporting

POST checks the communication paths within the Electronics Module and to other various printer components.

POST testing initializes the Control Panel, and in most cases if an error occurs, a text message is displayed on the Control Panel along with an LED blink code flashing on all three LEDs (Control Panel LED, PS LED and PE LED). If initialization of the Control Panel fails, POST errors will still report using the LED blink patterns. The sum of the flashes equal the error code. If the code has more than 5 flashes, there is a brief pause between each set of 5 flashes to make them easier to count. After all flashes occur within the code, there is a long pause and then the flash pattern repeats.

"Soft" POST errors, that do not prevent the printer from powering up completely, are displayed on the Control Panel for 5 seconds, and then the printer continues through the remainder of POST. There are no rear panel LED codes associated with soft errors. Most soft errors will cause the printer to print a Startup Page with the error message on it.

Note

Before replacing the Electronics Module for any POST errors, do the following:

1. Disconnect all connections to the Electronics Module.
2. Plug in the Power Cord and power on the Electronics Module.
3. If the error blink pattern changes from the original error reported before Step 1, the problem may not be in the Electronics Module, (see "Miscellaneous Electrical Troubleshooting" on page 4-56).

POST Error Reporting Blink Pattern Definition Table

8400 Error Code	PS, PE and Control Panel LEDs (for 8400)	POST Error Type	Description	8500/ 8550/8560 Error Code
01.01	Flutter then 01 blinks	Hard	Bad error code.	21.1
02.01	Flutter then 02 blinks	Hard	Failed machine check.	19.1
02.02	Flutter then 02 blinks	Hard	Printer panic.	19.2
03.01	Flutter only	Soft	ID read failure.	31.1
03.02	Flutter then 03 blinks	Hard	Mismatch.	31.2
03.03	Flutter only.	Soft	Version mismatch.	31.3
03.04	Flutter then 03 blinks	Hard	Access failure.	31.4
04.01	Flutter then 04 blinks	Hard	ID read failure.	23.1
04.02	Flutter then 04 blinks	Hard	ID mismatch.	23.2
04.03	Flutter then 04 blinks	Hard	TMVL mismatch, write/read failed.	23.3
04.04	Flutter then 04 blinks	Hard	TMVH mismatch, write/read failed.	23.4
05.01	Flutter then 05 blinks	Hard	Communications error. PLD I/O Board serial, link down/bad parity.	32.1
05.02	Flutter only	Soft	Communications error. PLD I/O Board serial, mismatch.	32.2

POST Error Reporting Blink Pattern Definition Table (Continued)

8400 Error Code	PS, PE and Control Panel LEDs (for 8400)	POST Error Type	Description	8500/ 8550/8560 Error Code
6.08	N/A	Soft	IDE drive general failure. Reseat IDE cable and power cable. If problem persists, replace the IDE drive. The printer will work without the IDE drive.	6.808
07.01	Flutter only	Soft	Control Panel link is invalid or bad parity.	16.1
07.02	Flutter only	Soft	Control Panel version mismatch.	16.2
08.01	Flutter only	Soft	Control Panel failed to initialize.	16.3
09.01	Flutter only	Soft	Control Panel data path failure.	16.4
10.01	Flutter then 10 blinks	Hard	PLD power control link down.	33.1
10.02	Flutter only	Soft	PLD power control link invalid, mismatch error.	33.2
11.01	Flutter then 11 blinks	Hard	EEPROM read failure. 1. Check EEPROM orientation. 2. Replace EEPROM.	12.1
11.02	Flutter then 11 blinks	Hard	EEPROM write failure. 1. Check EEPROM orientation. 2. Replace EEPROM.	12.2
11.03	Flutter then 11 blinks	Hard	EEPROM re-read failure. 1. Check EEPROM orientation. 2. Replace EEPROM.	12.3
11.04	Flutter then 11 blinks	Hard	EEPROM data failure, mismatch error. 1. Check EEPROM orientation. 2. Replace EEPROM.	12.4
12.xx	Flutter only	Soft	Configuration card test failure. 1. Check card orientation. 2. Reseat then replace the configuration card. **NOTE** Printer will work as a base model (without networking) without the configuration card (8400 only).	
13.01	Flutter then 13 blinks	Hard	PHY reset failure, reset stuck low.	2.1
13.02	Flutter then 13 blinks	Hard	PHY ID error, mismatch error.	2.2
14.xx	Flutter then 14 blinks	Hard	USB errors, N2280 netchip read, write, and mismatch errors, POST hard errors.	19.1
15.01	Flutter then 15 blinks	Hard	CPU interrupt error.	19.3
15.02	Flutter then 15 blinks	Hard	CPU interrupt error, missing CPU interrupts.	19.4
15.03	Flutter then 15 blinks	Hard	CPU interrupt error, IRQ spurious assertion.	19.5

POST Error Reporting Blink Pattern Definition Table (Continued)

8400 Error Code	PS, PE and Control Panel LEDs (for 8400)	POST Error Type	Description	8500/ 8550/8560 Error Code
15.04	Flutter then 15 blinks	Hard	CPU interrupt error, timer no assertion.	19.6
15.05	Flutter then 15 blinks	Hard	CPU interrupt error, spurious assertion.	19.7
15.06	Flutter then 15 blinks	Hard	CPU interrupt error, no assertion.	19.8
15.07	Flutter then 15 blinks	Hard	CPU interrupt error, spurious assertion.	19.11
15.08	Flutter then 15 blinks	Hard	CPU interrupt error, no assertion.	19.12
15.09	Flutter then 15 blinks	Hard	CPU interrupt error, spurious assertion.	19.13
15.10	Flutter then 15 blinks	Hard	CPU interrupt error, no assertion.	
15.11	Flutter then 15 blinks	Hard	CPU interrupt error, IRQ spurious assertion.	
16.01	Flutter only	Soft	Real time clock read failure.	11.1
16.02	Flutter only	Soft	Real-time clock write failure.	11.2
16.03	Flutter only	Soft	Real-time clock re-read failure.	11.3
16.04	Flutter only	Soft	Real-time clock does not tick.	11.4
		Soft	Trickle charge failure	11.5
17.01	Flutter then 17 blinks	Hard	Memory test, less than 128 MB of RAM detected. This is the minimum RAM required. Add more RAM. Reseat the RAM, then replace the RAM.	13.1
18.01	Flutter then 18 blinks	Hard	IPCB ID read failure.	
18.02	Flutter then 18 blinks	Hard	IPCB ID mismatch.	
18.03	Flutter then 18 blinks	Hard	IPCB PCI configuration failure.	
18.04	Flutter only	Soft	IPCB version mismatch.	
19.01	Flutter then 19 blinks	Hard	Check and reseat cables. Replace Hard Drive, if necessary.	

PEST Error Reporting

PEST tests occur after POST tests have been run and PostScript has been initialized. PEST checks the connections and operation of various printer components.

Error codes for PEST tests are displayed on the Control Panel and are all in the 37,XXX.xx series. For troubleshooting PEST error codes, “37,0XX.xx Errors - PEST Faults” on page 3-36.

Fault Code Error Message Troubleshooting

Fault Code Error Reporting

Fault codes are saved to NVRAM and can be retrieved from the printer's fault history.

All procedures that ask for a test to be run are referencing tests from within the "hidden" Service Diagnostics menu. For more information on Service Diagnostics tests, their results, and how to enter into diagnostic mode, see "Service Diagnostics" on page 4-4.

In normal customer mode, the printer will reboot each time an error occurs. If three of the same errors occur within 72 hours, or 1000 pages, the fault is displayed on the printer's Control Panel.

Interpreting Fault Codes

- Failing system (**XX**,yyy.zz)
- Failing subsystem (xx,**YYY**.zz)
- Checksum (xx,yyy.z**Z**
- Type of problem (xx,yyy.**Z**x)
- Print engine copy count when the error occurred (xx,yyy.zz**:123**)

(xx,yyy.4x) Device faults are indicated by a 4 in the tenths place of the fault code.

This indicates a hardware problem. The most common device faults troubleshooting procedures are documented in this section.

(xx,yyy.6x) Program faults are indicated by a 6 in the tenths place of the fault code.

Unfortunately, there are too many program faults to enumerate them all and most program faults will not mean anything unless you are intimately familiar with the code base. Some of the more common program faults are documented in this section.

(xx,yyy.7z) CPU exceptions are indicated by a 7 in the tenths place of the fault code.

The error code indicates both the PowerPC exception number and the region of firmware that was executing when the exception occurred: Engine, PostScript, Network, or Operating System.

Note

A CPU exception can either be caused by hardware or firmware error. Refer to the infoSMART Knowledge Base for descriptions of the most common faults.

1,000.4x Errors - 525-Sheet Feeder Faults

1,001.46: The upper 525-sheet feeder had an overcurrent condition. The lift motor or clutch may be shorted.

1,002.47: The lower 525-sheet feeder had an overcurrent condition. The lift motor or clutch may be shorted.

Troubleshooting Procedure for for 525-Sheet Feeder

Step	Questions or Actions	Yes	No
1	1. Unplug all connectors to the feeder. 2. Remove the feeder and inspect the connector. 3. Replace any damaged connectors either on the feeder or engine. 4. Reseat and reconnect the feeder. Did this correct the problem?	Complete.	Go to Step 2.
2	Inspect the Pick Rollers in the feeder tray(s). Are the rollers damaged, dirty, or not moving freely?	Replace the Pick Assembly.	Go to Step 3.
3	TRun the **Tray [3]/[4] Pick Clutch** test. Does the clutch operate correctly?	Go to Step 4.	Replace the feeder.
4	Run the **Tray [3]/[4] Lift Motor** test. Does the motor operate correctly?	Go to Step 5.	Replace the feeder.
5	Check the feeder wiring to the Electronics Module (J390). Is the wiring defective?	Replace the wiring and go to Step 3.	Replace the feeder.

1,0XX.6x Errors - 525-Sheet Feeder Program Faults

1. Reseat the printer on the feeder.
2. Ensure ground integrity (see “Ensuring Ground Integrity” on page 4-65).
3. Reset NVRAM.
4. Replace the feeder.

2,0XX.4x Errors - I/O Circuit Board Fault

2,001.47: The print engine cannot detect the presence of the I/O Board.

Troubleshooting Procedure for I/O Board

Step	Questions or Actions	Yes	No
1	Are all I/O Board connections properly seated?	Go to Step 3.	Go to Step 2.
2	Reseat the connections and power On the printer. Does the error persist?	Go to Step 3.	Complete.
3	Test the wiring from I/O board J840 to the power control board J800.	Replace the I/O Board.	

2,0XX.6x Errors - I/O Board Program Faults

2,001.69: The Electronics Module failed to initialize.

2,002.61: This fault code indicates a problem with the printer program. The engine firmware was unable to initialize the queues used for inter-task communication.

2,003.62: This fault code indicates a problem with the printer program. The engine firmware was unable to start the Service Diagnostics tasks.

2,004.63: Failure to start the print engine in suspend mode.

2,005.64: This fault code indicates a problem with the printer program. ROM could not be opened for reading (idiags).

2,006.65: This fault code indicates a problem with the printer program. ROM could not be loaded (idiags).

2,007.66: This fault code indicates a problem with the printer program (idiags) entry point cannot be found.

a. Reset NVRAM and retest.
b. Ensure ground integrity (see “Ensuring Ground Integrity” on page 4-65).
c. Replace the EEPROM chip.
d. Reboot the printer.

2,008.67: Configuration card is missing.

2,009.68: Configuration card is bad.

2,010.69: Configuration card is blank.

2,011.61: Configuration card is for the wrong product.

2,012.62: Configuration card is an invalid model.

a. Turn off printer.
b. Verify that configuration card is correct card for printer.
c. Insert or replace configuration card.
d. Turn on printer.
e. If problem continues, replace the Electronics Module.

3,0XX.6x Errors - IPC Program Faults

There is a communication problem between the engine and PostScript regions.

a. Reset NVRAM, and then retest.
b. Replace the EEPROM chip.

4,0XX.4x Errors - Process Control System Fault

4,017.47: This fault code indicates a problem with the process control system. The ambient temperature is considered too cold to warm up the printer (less than 10^{o} C).

4,018.48: This fault code indicates a problem with the process control system. The Printhead temperature dropped below the head cleaning needed threshold.

4,020.41: This fault code indicates a problem with the process control system. Declared when the printer is booted in FTTR (Fast Time to Ready) mode and the head/wiper contact flag is set in NVRAM. The printer cannot run in FTTR mode with the head/wiper in contact because it would be unwise to separate the two when the printer is cold (could tear wiper.) Service requested that this be a device fault in order to alert the service person to this condition.

4,021.42: This fault code indicates a problem with the process control system. Declared when the printer is booted in FTTR mode and the Drum is dirty. Cleaning the Drum when very cold could increase the chance of gluing media to the Drum surface around the stripper fingers. Service requested that this be a device fault in order to alert the service person to this condition.

Troubleshooting Procedure for Process Control System

Step	Questions and Actions	Yes	No
1	1. Verify the temperature of the room where the printer is located (see "Environmental Specifications" on page 1-12). 2. Is the room temperature too cold? 3. Ensure the printer is acclimated to the room temperature. Did this correct the problem?	Complete.	Go to Step 2.
2	Run the **Monitor Heaters tests** with all heaters **ON**. Are the heaters operating correctly and within specification?	Replace the Electronics Module.	Go to Step 3.
3	Inspect the harness to the failed heater. Is the harness damaged?	Replace the harness.	Replace the problem component.

4,024.42: This fault code indicates a problem with the wiper. The wiper is not aligned properly and engaged the headtilt while in the waste lock position.

Troubleshooting Procedure for 4,024 Error Code

Step	Questions and Actions	Yes	No
1	Ensure the Process Drive is correctly homed as described in "Homing the Process Drive Train" on page 6-8.	Is the problem fixed?	Go to Step 2.
2	Run the **Check Wiper Alignment** test. Did the test fail?	Perform the Wiper Alignment Procedure and test again. Go to Step 3 if the test fails again.	Go to Step 3.
3	Run the **Wiper Drive** test. Did the test fail?	Go to Step 4.	Go to Step 6.
4	Inspect the wiper drive and wiper lock system. Look for ink in the belts. Is the wipe system operating correctly?	Go to Step 5.	Replace the problem component.
5	Inspect the Head Maintenance Clutch. Is there any oil or contamination?	Clean the interior of the system and replace clutch if necessary.	Go to Step 6.
6	Run the **Head Maintenance Clutch** test. Is the Head Maintenance Clutch operating correctly?	Replace in this order: ■ Exit Module ■ Media Drive ■ Wiper Blade	Replace the Head Maintenance Clutch.

4,025.46: This fault code indicates a problem with the process control system. Cannot successfully home the transfix mechanism.

Troubleshooting Procedure for 4,025 Error Code

Step	Questions and Actions	Yes	No
1	1. Check for obstructions around the Printhead. Look for ink shards in gears of the tilt drive. 2. If the Printhead is obstructed, remove any obstruction from the system and reboot. Did this fix the problem?	Complete.	Go to Step 2.
2	Check the Printhead harness routing. Is the wiring blocking the Printhead?	Re-route all wiring to the Printhead.	Go to Step 3.

Troubleshooting Procedure for 4,025 Error Code (Continued)

Step	Questions and Actions	Yes	No
3	Remove the Waste Tray and Printhead and look for ink build-up. Is there ink build-up anywhere in the printer?	Clean any ink or debris which may be restricting movement of the drive train or Printhead.	Go to Step 4.
4	1. Check the Process Drive for damage. 2. Ensure the gears are correctly aligned (see "Homing the Process Drive Train" on page 6-8). Is the Process Drive damaged?	Replace the Process Drive.	Go to Step 5.
5	Check the nose cone alignment on the X-Axis Motor. Is the nose cone misaligned with the Printhead shaft?	Correct alignment of the nose cone.	Go to Step 6.
6	1. Check the X-Axis Motor connector for damage. 2. Run the **X-Axis Motor** test to check the X-Axis Motor current. Did the test fail?	Replace the X-Axis Motor.	Go to Step 7.
7	Run the **Tilt Drive** test. Did the test fail?	Replace the Process Drive.	

4,0XX.6x Errors - Process Control Software Fault

1. Reset NVRAM and then retest.
2. Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65).
3. Replace the EEPROM chip.
4. Reboot the printer.

5,0XX.4x Errors - Y-Axis Sub-System Fault

5,001.41: The Drum turned one full revolution without seeing the Drum home sensor activate.

5,002.42: The Y-Axis encoder is not working properly or the Drum has stalled.

5,003.43: There is a general problem with the Y-Axis sub-system.

5,004.44: Y-Axis fault_general fail problem with Drum motion sub-system.

Troubleshooting Procedure for Y-Axis Sub-System

Step	Questions and Actions	Yes	No
1	From the Service Diagnostic **Monitor Menu**, run the **Y-Axis Encoder** test. Did the test pass?	Go to Step 2.	Go to Step 3.
2	Inspect the Y-Axis Motor connector. Is the wiring faulty?	Replace the harness or Y-Axis Motor.	Go to Step 4.
3	Inspect the encoder harness. Is the harness faulty?	Replace the harness.	Replace the Drum Assembly.
4	1. Run the **Y-Axis Drive** test. 2. Check the current values. Are the values within normal operating range?	Go to Step 5.	Replace the Y-Axis Motor.
5	1. Run the **Y-Axis Belt Tension** test. 2. Check the current values. Are the values within the normal operating range?	Go to Step 6.	Replace the Y-Axis belt.
6	Run the **Y-Axis Motor** test. Did the tests pass?	Replace the Drum Assembly.	Replace the Y-Axis Motor.

5,0XX.6x Errors - Program Faults

5,001.63: There is a problem with the Y-Axis sub-system.

5,005.67: If not in the home or idle state, the system faults out. Software fault.

5,006.68: Software fault.

5,007.60: Software fault.

5,008.61: PostScript failed to fill the race buffer during imaging. Software fault.

5,009.62: There were errors during imaging. Possible jets on/off outside of the deadband area. Software fault.

a. Reset NVRAM and retest.
b. Ensure ground integrity for the printer (see “Ensuring Ground Integrity” on page 4-65).
c. Replace the EEPROM chip.
d. Reboot the printer.

6,0XX.4x Errors - X-Axis Fault

6,000.41: An X-Axis Motor current error occurred.

Troubleshooting Procedure for X-Axis Motor

Step	Questions and Actions	Yes	No
1	1. Inspect the Printhead power cable and heater wiring. 2. Verify the Printhead travels smoothly from left to right. 3. Ensure the Printhead does not bind due to ink spills. Is Printhead movement restricted?	Go to Step 2.	Go to Step 3.
2	Clear the obstruction restricting Printhead movement. Did this correct the problem?	Complete.	Go to Step 3.
3	Inspect the X-Axis Motor harness. Is the wiring damaged?	Replace the harness.	Go to Step 4.
4	Use Service Diagnostics to test the **X-Axis drive**. Did the test fail?	Replace the X-Axis Motor.	Replace the Electronics Module.

6,0XX.6x Errors - Program Faults

6,001.64: The X-Axis task received an unexpected message.

6,002.65: Attempt to home the X-Axis from a state where homing is not allowed.

6,008.62: Attempt to use the X-Axis drive without initializing it.

6,011.65: Attempt to service the X-Axis while not in the appropriate state.

6,013.67: Unknown X-Axis program fault.

6,017.62: An attempt was made to drive the X-Axis using the wrong server.

6,018.63: An attempt was made to move with the X-Axis uninitialized.

6,019.64: An attempt was made to move the X-Axis from a homeless state.

6,023.68: Could not allocate memory for X-Axis home parameters.

6,025.66: An attempt was made to home with the X-Axis uninitialized.

6,032.68: Could not find a solution to the described home motion profile.

6,033.60: Could not allocate memory for X-Axis move parameters.

a. Reset NVRAM, and then retest.

b. Ensure ground integrity for the printer (see “Ensuring Ground Integrity” on page 4-65).

7,0XX.4x Errors - Process Motor Gearbox Faults

7,002.44: There is a problem with the process motor sub-system. The process motor stalled during operation.

Troubleshooting Procedure for 7,002 Error Code

Step	Questions and Actions	Yes	No
1	Verify the Process Drive system is properly homed, see "Homing the Process Drive Train" on page 6-8. Did this resolve the problem?	Complete.	Go to Step 2.
2	Use Service Diagnostics to run the **Tilt Axis Drive** test. Did the test fail?	Go to Step 3.	Go to Step 4.
3	1. Check for and remove any obstructions in the Process Drive. 2. Ensure the Process Drive gears are correctly aligned. Are the gears damaged?	Replace the Process Drive.	Go to Step 4.
4	Use Service Diagnostics to run the **Process Motor** test. Did the test fail?	Replace the Process Drive.	Go to Step 5.
5	Use Service Diagnostics to run the **Transfix Drive Slow** test. Did the test fail?	Verify the transfix cams are not damaged. Replace problem component.	Replace the Process Drive.

7,006.xx: The Head Tilt Solenoid is not activating the Head Tilt Gear, or the Printhead is not tilting properly.

Troubleshooting Procedure for 7,006 Error Code

Step	Questions and Actions	Yes	No
1	Ensure the Process Drive system is correctly homed as described in "Homing the Process Drive Train" on page 6-8.	Is the problem fixed?	Go to Step 2.
2	Reboot the printer. Is the solenoid activating the Head Tilt Gear?	Go to Step 4.	Go to Step 3.
3	Is ink blocking Head Tilt Gear motion? Is the tilt-head latch properly installed?	Clean or reinstall the head-tilt and start over with Step 1.	Go to Step 4.

Troubleshooting Procedure for 7,006 Error Code (Continued)

Step	Questions and Actions	Yes	No
4	Review instructions for 7,008.xx and 7,010.xx fault codes.	Follow recommended actions for error codes and reboot the printer.	

7,0XX.4x Errors- Printhead Tilt Faults

The 7,007.49, 7,008.41, 7009.42, and 7,010.43 errors indicate that the Printhead was unable to tilt normally on its axis. Possible causes include:

- The printer was powered off in the middle of a cleaning cycle and the Wiper Blade has frozen to the Printhead.
- A Drum Maintenance Camshaft lobe is broken and holding the Drum Maintenance Kit's oil roller against the Drum when it should be retracted to its home position.
- Process Drive not being aligned correctly.
- A damaged Printhead Restraint.
- Ink spilled in the Roll Block preventing proper Printhead motion.
- Ink or other debris under the Printhead preventing proper motion.
- The Wiper Assembly not being aligned correctly or ink spilled in the wiper tracks.
- The Head Tilt Gear not being homed correctly.
- The X-Axis Motor nose cone not being installed correctly.
- The ferrite torrid on the Printhead interface cable has slipped behind the Printhead causing the Printhead to bind when it tilts backwards.
- The black plastic shroud on the back of the Printhead is snapped off and binding the Printhead when it tilts back.

Caution

After servicing the printer, manually set the following assemblies to their home position before powering on the printer. See Section 6 for instructions on setting these components to their home positions.

- Printhead (tilted forward and disengaged from Printhead tilt gear)
- Head Tilt Gear (disengaged from Process Drive train; arrows on left frame point to each other)
- Wiper Assembly (bottom of travel)
- Process Drive (holes on Transfix Camshaft and Drum Maintenance Camshaft line up with marks on frame, large gears within assembly line up with holes in Process Drive housing)

7,007.49: The process motor stalled while tilting the head.

Troubleshooting Procedure for 7,007 Error Code

Step	Questions and Actions	Yes	No
1	1. Check the Printhead wire routing. 2. Remove the Printhead and inspect the Printhead tilt and drive gears for ink spills. 3. Re-route the wiring. 4. Clean around the gears and Printhead. Did this correct the problem?	Complete.	Go to Step 2.
2	To ensure Process Drive is correctly aligned, homed, and free from damage, see "Homing the Process Drive Train" on page 6-8. Did this correct the problem?	Complete.	Replace the Process Drive.

7,008.41: The head tilt is not engaged, or the Printhead is stuck in the tilt position by the tilt arms.

Troubleshooting Procedure for 7,008 Error Code

Step	Questions and Actions	Yes	No
1	Reboot the printer. Did this correct the problem?	Go to Step 2.	Complete.
2	1. Check the printer for ink spills on the HeadTilt Gear and the drive train. 2. Clean and reboot the printer. Did this correct the problem?	Complete.	Go to Step 3.
3	Check that the Printhead moves properly left and right.	Go to Step 4.	Remove any obstructions or replace any defective parts.
4	Ensure the Process Drive is correctly aligned and homed (see "Homing the Process Drive Train" on page 6-8). Are the gears damaged?	Replace the Process Drive.	Go to Step 5.
5	1. Check the Process Drive for obstructions or damaged. 2. Remove any obstructions. Is the gearbox damaged?	Replace the Process Drive.	Go to Step 6.
6	Use Service Diagnostics to run the **Tilt Axis Drive** test. Did the test fail?	Replace the Process Drive.	Go to Step 7.
7	Use Service Diagnostics to run the **Head Maintenance Wiper Clutch** test. Did the test fail?	Replace the Head Maintenance Clutch.	Go to Step 8.

Troubleshooting Procedure for 7,008 Error Code (Continued)

Step	Questions and Actions	Yes	No
8	Perform the Wiper Alignment procedure (see "Wiper Alignment Procedure" on page 6-2). Did this correct the problem?	Complete.	Go to Step 9.
9	Use Service Diagnostics to run the **Wiper Drive** test. Did the test fail?	Inspect the wiper drive system and replace any defective parts.	Complete.

7,009.42: The Printhead is tilted back but not properly restrained in the park arms.

Troubleshooting Procedure for 7,009 Error Code

Step	Questions and Actions	Yes	No
1	Check that the right and left Printhead Restraints operate correctly and are not damaged.	Complete.	Go to Step 2.
2	Check that the Wiper Assembly is aligned correctly (see "Wiper Alignment Procedure" on page 6-2).	Complete.	Go to Step 3.
3	1. Check the Printhead wire routing. 2. Remove the Printhead and clean around the Printhead tilt gears. Did this correct the problem?	Complete.	Go to Step 4.
4	Check that the Process Drive gears are correctly aligned and homed (see "Homing the Process Drive Train" on page 6-8). Did this correct the problem?	Complete.	Go to Step 5.
5	Replace the Process Drive. Did this correct the problem?	Complete.	Go to Step 6
6	Use Service Diagnostics to run the **Head Maintenance Wiper Clutch** test. Did the test fail?	Replace the Head Maintenance Clutch.	Go to Step 7.
7	Use Service Diagnostics to run the **Wiper Drive** test. Did the test fail?	Inspect the maintenance drive system, replace any defective parts.	Replace the Exit Module.

7,010.43: The Printhead is stuck in the tilted position, or is not able to tilt forward to the print position, due to problems.

7,011.44: This is a soft fault and will not halt the printer.

7,012.45: The Drum transfix is not in home position, after the return home motion has been completed.

7,014.47: The Printhead is not locked in the head tilt restraint spring.

7,015.48: The head tilt restraint spring is out of place.

Troubleshooting Procedure for 7,010 to 7,015 Error Code

Step	Questions and Actions	Yes	No
1	Reboot the printer. Did this correct the problem?	Complete.	Go to Step 2.
2	Do the Printhead Restraints rotate correctly?	Go to Step 3.	Repair or replace the Printhead Restraints.
3	1. Has ink spilled ink around the Printhead that prevents the Printhead from moving to its center position? You should be able to push the Printhead right to left.	Clean the Printhead area.	Go to Step 5.
4	Is the Printhead stuck to the Wiper Blade?	Start the printer in diagnostics mode and run idiags test Exercise Heater - toggle Printhead heaters to soften the ink. Manual separate the wiper and Printhead. Set them in their home positions.	Go to Step 4.
5	Does the X-Axis Motor drive the Printhead to its center position (so it can tilt forward)?	Go to step 6.	Troubleshoot the X-Axis drive.
6	1. Check the Process Drive for obstructions or damaged. 2. Ensure the gears are correctly aligned and homed. 3. Verify the process shaft and drive module shaft are at their home positions. Did this correct the problem?	Complete.	Go to Step 7.
7	Has ink spilled on the Head Tilt Gear on its drive train (near left side of the Printhead)?	Clean the gears.	Go to Step 8.

Troubleshooting Procedure for 7,010 to 7,015 Error Code (Continued)

Step	Questions and Actions	Yes	No
8	Use Service Diagnostics to run the **Head Maintenance Wiper Clutch** test. Did the test fail?	Replace the Head Maintenance Clutch.	Go to Step 9.
9	1. Align the Wiper Assembly (page 6-2). 2. Use Service Diagnostics to run the **Wiper Drive** Test. Did the test fail?	Replace the Exit Module.	Go to Step 10.
10	1. Use Service Diagnostics to run the **Load Maintenance Clutch** test. Did the test fail?	Inspect the maintenance drive system, replace any defective parts.	Go to step 11.
11	Verify the Head Tilt Gear engages. You can manually set the Head Tilt Gear. Is the gear engaged properly?	Go to Step 12.	Set the Head Tilt Gear.
12	Use Service Diagnostics to run the **Tilt Axis Drive** test. Did the test fail?	Replace the Process Drive.	Go to Step 13.
13	Use Service Diagnostics to run the **Process Motor** test. Did the test fail?	Replace the Process Drive.	

7,0XX.6x Errors - Program Faults

1. Reset NVRAM and retest.
2. Ensure ground integrity for the printer (see “Ensuring Ground Integrity” on page 4-65).

8,0XX.xx Errors - Wiper/Media Drive Faults

8,005.48: The Media Drive stalled while moving the Wiper to home position.

8,006.49: The Wiper cannot verify the home position.

8,007.41: The Wiper stalled finding home.

8,008.42: The Wiper stalled while trying to move away from home position.

8,009.43: The Media Drive stalled while moving without the Head Maintenance Clutch engaged.

8,015.49: The Media Drive stalled while moving the cap/wipe to park position.

8,025.41: The Media Drive stalled while moving the cap/wipe from park position.

8,035.42: The Media Drive stalled while moving the cap/wipe Up.

8,045.43: The Media Drive stalled while moving the cap/wipe Down.

8,055.44: The Media Drive stalled while engaging headtilt.

Troubleshooting Procedure for Wiper/Media Gearbox

Step	Questions and Actions	Yes	No
1	Check for obstructions in the Wiper Assembly path. Is the Wiper Assembly obstructed by the Printhead or wiring?	Clear any obstructions.	Go to Step 2.
2	For an **8,005.48** error: 1. Check for paper in the paper path that is adding drag to the rollers. Look for paper or wiring interfering with the take away roller. 2. Remove the Tray 1 Pick Solenoid to view the meshing of the Take Away Roller's gears to the Media Drive Assembly. Did this correct the problem?	Complete.	Go to Step 5.
3	For an **8,007.41** error: Check for a missing KL-clip securing the Head Maintenance Clutch. Replace if missing. Did this correct the problem?	Complete.	Go to Step 5.
4	For an **8,009.43** error: 1. Ensure that there is no paper in the paper path adding drag to the rollers. 2. Ensure the Media Drive Assembly is fully seated and correctly installed. 3. Remove the Tray 1 Pick Solenoid to view the meshing of the take away roller's gears to the Media Drive Assembly. 4. Ensure the feed rollers are properly engaged in the drive gears. Did this correct the problem?	Complete.	Replace the Media Drive Assembly.
5	Run the **Wiper Drive** test. Did the test pass?	Go to Step 6.	Go to Step 7.

Troubleshooting Procedure for Wiper/Media Gearbox (Continued)

Step	Questions and Actions	Yes	No
6	Run the **Wiper Alignment** test (see "Wiper Alignment Procedure" on page 6-2). Did the test pass?	Go to Step 8.	Go to Step 7.
7	1. Inspect the wiper system for improper operation, obstructions, or damage (broken gear or belt). Look for ink in the Wiper Belt channels. 2. Ensure the wiper system is properly aligned (see "Wiper Alignment Procedure" on page 6-2). Did this correct the problem?	Complete.	Go to Step 8.
8	Run the **Head Maintenance Clutch** test. Did the test pass?	Go to Step 9.	Replace the Head Maintenance Clutch.
9	Is the head lock mechanism on the right end of the Exit Module functioning properly?	Go to Step 10.	Replace the Exit Module.
10	Are there obstructions or spilled ink on the Wiper Blade, the Head Tilt Gear drive path, or under the Printhead? Is the Waste Tray overfilled?	Clean the inside of the printer and retest.	

8,0XX.6x Errors - Program Faults

1. Reset NVRAM, and then retest.
2. Ensure ground integrity for the printer (see "Ensuring Ground Integrity" on page 4-65).

9,0XX.xx Errors - Ink Loader Faults

9,000.44: Ink Loader device fault

9,005.49: The cyan ink melt heater is On, but ink is not dripping.

9,006.41: The magenta ink melt heater is On, but ink is not dripping.

9,007.42: The yellow ink melt heater is On, but ink is not dripping.

9,008.43: The black ink melt heater is On, but ink is not dripping.

9,015.4x through 9,018 (8500/8550/8560 only): When the Ink Loader door is opened to clear an ink jam, the following codes are recorded: 9,01x.41, where x= 5 for cyan, 6 for magenta, 7 for yellow, and 8 for black.

9,025.4x through 9, 028 (8500/8550/8560 only): When the inkloader door is opened for a second time, the following codes are recorded: 9,02x.41, where x= 5 for cyan, 6 for magenta, 7 for yellow, and 8 for black.

9,035.43 through 9,038 (8500/8550/8560 only): Ink count sensor flags are stuck after melting 2.5 ink sticks. The following codes are recorded: 9,03x.41, where x= 5 for cyan, 6 for magenta, 7 for yellow, and 8 for black.

Features on the bottom of genuine Xerox ink sticks actuate the Ink Out Sensor located at the forward end of each ink channel of the Ink Loader. The sensor indicates the passage of ink to provide a count of ink consumption.

Damaged or non-genuine ink sticks may not reliably actuate the sensors. This can lead to false Ink Out messages as well as Ink Stick count faults. Using 8400 model ink in a 8500/8550/8560 models will also cause 9,03x.4x ink stick count faults.

Troubleshooting Procedure for Ink Loader

Step	Questions and Actions	Yes	No
1	Is the ink Genuine Xerox? Are they the correct sticks for the model?	Go to Step 2.	1. Advise customer. 2. Replace the Ink with Xerox Ink. 3. Run **Clear ISC Fault** test to clear the error. The **Clear ISC Fault** is located in the Internal Diagnostics Function menu.
2	Manually verify that the ink stick is able to advance in the ink loader chute. Check for broken or wrong type ink sticks.	Go to Step 3.	1. Remove any blockage and/or replace the ink stick. 2. Replace the Ink Loader. 3. Run **Clear ISC Fault** test to clear the error.

Troubleshooting Procedure for Ink Loader (Continued)

Step	Questions and Actions	Yes	No
3	Test the Ink Count Sensor by running the **Monitor Sensors** test in Service Diagnostics. Insert the clean, eraser end of a pencil thru the lowermost oval slot in the Ink Loader. Actuate the appropriate sensor by sliding the pencil down the white channel guide until the sensor is tripped. If the sensor is functional, a state change appears on the Control Panel as <*color*> Ink Present H. When released, the reading changes to L. The test only displays a reading when a sensor change occurs. If a flag is stuck, no reading is displayed. Did the test pass?	Check for defects in the genuine Ink Sticks. If no defects are found, go to Step 4. Replace ink if necessary.	Replace the Ink Loader.
4	Test the ink melt heaters. Run the appropriate **Ink Melt [1, 2, 3, 4] Heater** test. 1 = Yellow 2 = Cyan 3 = Magenta 4 = Black Did the test pass?	Replace the Printhead.	1. Replace the Ink Loader. 2. Run **Clear ISC Fault** test to clear the error.

Note

Xerox is not financially responsible for the incorrect operation of its products caused by the use of non- Xerox ink.

9,009.44 and 9,00X.6x Errors - Program Faults

9,009.44: This fault indicates a device failure attempting to access NVRAM.

a. Reset NVRAM and retest.

b. Ensure ground integrity for the printer (see “Ensuring Ground Integrity” on page 4-65).

11,0XX.xx Errors - Electronics Module Interface Fault

11,001.47: Upper 525-sheet feeder broken serial link detected.

11,002.41: Lower 525-sheet feeder broken serial link detected.

11,002.48: Lower 525-sheet feeder broken serial link detected.

11,003.42: Control Panel broken serial link detected.

11,003.49: Control Panel broken serial link detected.

11,004.41: Control Panel or I/O Board broken serial link detected.

11,004.43: I/O Board broken serial link detected.

11,005.42: Power control broken serial link detected.

11,005.44: Power control broken serial link detected.

11,006.43: Printhead broken serial link detected.
11,006.45: Printhead broken serial link detected.
11,007.44: PCI error detected.
11,008.45: The DMA hardware is not responding.
11,009.46: Communication timeout failure detected.
11,010.47: Hardware version mismatch.
11,010.48: Hardware version mismatch.
11,011.48: Software version mismatch.
11,012.49: The power control PLD does not match the expected version.
11,013.41: I/O PLD version mismatch.
11,014.42: Control Panel version mismatch.
11,015.43: Printhead PLD version mismatch.
11,016.44: Lower 525-sheet feeder PLD version mismatch.
11,017.45: Upper 525-sheet feeder PLD version mismatch.
11,018.46: Titan version mismatch.

Troubleshooting Procedure for Electronic Module Interface

Step	Questions and Actions	Yes	No
1	Ensure ground integrity for the printer. Did this resolve the error?	Complete.	Go to Step 2.
2	1. Inspect and reseat all connectors. 2. Inspect the gray cable between the I/O board and the Electronics Module. 3. Ensure the cables are properly dressed in the wiring raceway as detailed in the wiring diagram section of this manual. Did this correct the problem?	Complete.	Go to Step 3.
3	Reset NVRAM and retest. Did this resolve the problem?	Complete.	Go to Step 4.
	■ 11, 001.47 and 11,017.45	Replace Tray Lift Motor or the Electronics Module.	
	■ 11,002.48 and 11, 016.44	Replace the optional tray (or check wiring).	
	■ 11,003.49 and 11,0014.42	Replace the I/O board.	
	■ 11,004.41 and 11,013.41	Replace the I/O board or the Control Panel.	
	■ 11,006.43 and 11,015.43	Replace the Printhead.	
	■ 11,009.46	Replace the I/O board or the Electronics Module.	
	■ For all other 11,000.4x errors:	Replace the Electronics Module.	

11,100.60 Errors - Temperature Error

The root problem for this error is temperature sensitivity with the power supply's opto-isolator chips. Check that the room temperature does not exceed specifications and the fans run correctly. If OK, then replace the Electronics Module.

12,000.60 Errors - Program Faults

1. Reset NVRAM and retest.
2. Ensure ground integrity for the printer (see "Ensuring Ground Integrity" on page 4-65).

13,0XX.xx Errors - Thermal Faults

13,000.48: Thermal fault.

Troubleshooting Procedures for Error Code 13,000 (Printhead)

Step	Questions and Actions	Yes	No
1	Ensure ground integrity for the printer. Did this correct the problem?	Complete.	Go to Step 2.
2	Reset NVRAM and retest. Did this correct the problem?	Complete.	Go to Step 3.
3	Check and reseat all data cables to the Printhead. Did this correct the problem?	Complete.	Replace the Printhead.

13,003.42:

13,007.46:

Troubleshooting Procedures for 13,003 to 13,007 Error Code

Step	Questions and Actions	Yes	No
1	Ensure ground integrity for the printer. Did this correct the problem?	Complete.	Go to Step 2.
2	Reset NVRAM and retest. Did this correct the problem?	Complete.	Replace in this order: ■ NVRAM ■ Electronics Module

13,008.47: The Drum heater is too hot.

13,010.49: The Drum heater took too long to reach its setpoint.

Troubleshooting Procedure for 13,008 to 13,010 Error Code (Drum Heater)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see "Environmental Specifications" on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65). Are all components grounded properly?	Go to Step 3.	Resolve ground integrity.
3	Is the error code associated with an overheat condition?	Go to Step 4.	Go to Step 6.
4	Verify clearance for adequate air flow. Are any of the vents blocked?	Advise customer.	Go to Step 5.
5	Using Service Diagnostics, run the **Drum Fan Motor** test. Did the test pass?	Go to Step 6.	Replace the Drum Fan and/or the harness.
6	Check the Electronics Module Fan. Is the fan operating correctly?	Go to Step 7.	Replace the Electronics Module Fan.
7	Using Service Diagnostics, run the **Drum Temperature Sensor** test. Did the test pass?	Go to Step 8.	Replace the Drum Temperature Sensor.
8	Using Service Diagnostics, run the **Drum Heater** test. Did the test pass?		Replace the Drum Temperature Sensor.
9	Check continuity of the F0130 fuse on the Preheater. Is the fuse blown?	Replace the Preheater.	

13,067.43: The Drum Temperature Sensor circuit is open.

13,069.45: The Drum Temperature Sensor circuit is shorted.

13,071.47: The Drum Temperature Sensor returned a bad reading, or the reading was corrupted by ESD (Electrostatic Discharge).

Troubleshooting Procedure for 13,067 to 13,071 Error Code (Drum Thermistor)

Step	Questions and Actions	Yes	No
1	Using Service Diagnostics, run the **Drum Temperature Sensor** test. Did the test pass?	Go to Step 2.	Replace the Drum Temperature Sensor.
2	Inspect the sensor wiring harness. Is the wiring free from defects? Is the wiring correctly routed through the pass-thru and not pinched against the Drum?	Replace the Drum Temperature Sensor.	Replace the sensor harness.

13,072.48: The Preheater got too hot.

13,074.41: The Preheater took too long to reach its setpoint.

13,131.44: The Preheater thermistor circuit is open.

13,133.46: The Preheater thermistor circuit is shorted.

13,135.48: The Preheater thermistor returned a bad reading, or the reading was corrupted by ESD.

Troubleshooting Procedure for 13,072 to 13,135 Error Code (Preheater)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see “Environmental Specifications” on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Run the **Preheater** test. Did the test pass?	Replace the I/O Board.	Go to Step 3.
3	Check the wiring from the Preheater. Is the wiring connected and intact?	Replace the Preheater.	Replace the harness.

13,136.49: The Printhead left jetstack heater is too hot.

13,138.42: The Printhead left jetstack heater took too long to reach its setpoint.

13,195.45: The Printhead left jetstack thermistor circuit is open.

13,197.47: The Printhead left jetstack thermistor circuit is shorted.

13,199.49: The Printhead left jetstack thermistor returned a bad reading, or the reading was corrupted by ESD.

Troubleshooting Procedure for 13,136 to 13,199 Error Code (Printhead)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see "Environmental Specifications" on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65). Are all components grounded properly?	Go to Step 3.	Resolve ground integrity.
3	Use Service Diagnostics to run the **Left Jetstack Temperature** test. Did the test pass?	Go to Step 4.	Replace the Printhead.
4	Check and reseat all wiring to the Printhead. Did this correct the problem?	Complete.	Replace the Printhead.

13,200.41: The Printhead right jetstack heater is too hot.

13,202.43: The Printhead right jetstack heater took too long to reach its setpoint.

13,259.46: The Printhead right jetstack thermistor circuit is open.

13,261.48: The Printhead right jetstack thermistor circuit is shorted.

13,263.41: The Printhead right jetstack thermistor returned a bad reading, or the reading was corrupted by ESD.

Troubleshooting Procedure for 13,200 to 13,263 Error Code (Printhead)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see "Environmental Specifications" on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Ensure the ground integrity (see "Ensuring Ground Integrity" on page 4-65). Are all components grounded properly?	Go to Step 3.	Resolve ground integrity.
3	Run the **Right Jetstack Temperature** test. Did the test pass?	Go to Step 4.	Replace the Printhead.
4	Check and reseat all wiring to the Printhead. Did this correct the problem?	Complete.	Replace the Printhead.

13,264.42: The Printhead reservoir heater got too hot.

13,266.44: The Printhead reservoir heater took too long to reach its setpoint.

13,323.47: The Printhead reservoir thermistor circuit is open.

13,325.49: The Printhead reservoir thermistor circuit is shorted.

13,327.42: The Printhead reservoir thermistor returned a bad reading, or the reading was corrupted by ESD.

Troubleshooting Procedure for 13,264 to 13,327 Error Code (Printhead)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see "Environmental Specifications" on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65). Are all components grounded properly?	Go to Step 3.	Resolve ground integrity.
3	Run the Printhead **Reservoir Temperature** test. Did the test pass?	Go to Step 4.	Replace the Printhead.
4	Check and reseat all wiring to the Printhead. Did this correct the problem?	Complete.	Replace the Printhead.

13,328.43: The ink loader CYAN heater is too hot.

13,330.45: The ink loader CYAN heater took too long to reach its setpoint.

13,387.48: The ink loader CYAN thermistor circuit is open.

13,389.41: The ink loader CYAN thermistor circuit is shorted.

13,391.43: The ink loader CYAN thermistor returned a bad reading, or was corrupted by ESD.

13,392.44: The ink loader MAGENTA heater is too hot.

13,394.46: The ink loader MAGENTA heater took too long to reach its setpoint.

13,451.49: The ink loader MAGENTA thermistor circuit is open.

13,453.42: The ink loader MAGENTA thermistor circuit is shorted.

13,455.44: The ink loader MAGENTA thermistor returned a bad reading, or ESD corruption.

13,456.45: The ink loader YELLOW heater got too hot.

13,458.47: The ink loader YELLOW heater took too long to reach its setpoint.

13,515.41: The ink loader YELLOW thermistor circuit is open.

13,517.43: The ink loader YELLOW thermistor circuit is shorted.

13,519.45: The ink loader YELLOW thermistor returned a bad reading, or ESD corruption.

13,520.46: The ink loader BLACK heater got too hot.

13,522.48: The ink loader BLACK heater took too long to reach its setpoint.

13,579.42: The ink loader BLACK thermistor circuit is open.

13,581.44: The ink loader BLACK thermistor circuit is shorted.

13,583.46: The ink loader BLACK thermistor returned a bad reading, or ESD corruption.

Troubleshooting Procedure for 13,326 to 13,583 Error Code (Ink Loader)

Step	Questions and Actions	Yes	No
1	Check that the ambient room temperature is within specifications (see "Environmental Specifications" on page 1-12). Is the room too cold or too hot?	Advise customer.	Go to Step 2.
2	Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65). Are all components grounded properly?	Go to Step 3.	Resolve ground integrity.
3	Inspect and reseat the wiring to the ink loader. Check for open wires. Did this correct the problem?	Go to Step 4.	Replace the I/O board or the Combined Right Cable.
4	Run the appropriate **Ink Melt** test. 1 = Yellow 2 = Cyan 3 = Magenta 4 = Black Did the test pass?		Replace the Ink Loader.

13,000.6x Errors - Program Faults

13,001.62: Thermals failed to read from printer NVRAM.

13,002.63: Value is not in valid range.

13,003.64: Thermal control task received an unexpected message.

13,004.65: Thermal control task was expecting initialization message, but received other.

13,005.66: Thermal code tried to command a segment ID that did not exist.

13,006.67: Thermal code tried to command a segment ID that did not exist.

13,007.68: Thermal power manager task was expecting initialization message, but received other.

13,008.60: Thermal power manager task received an unexpected message.

a. Reset NVRAM and retest.

b. Ensure ground integrity for the printer (see "Ensuring Ground Integrity" on page 4-65).

19,0XX.xx Errors - Printhead Calibration faults.

19,001.46: HFD server failed due to NVRAM operation. This fault only occurs when the printer is set in manufacturing mode. Program fault.

19,002.47: Attempted to perform a Printhead operation without the Printhead NVRAM data being loaded.

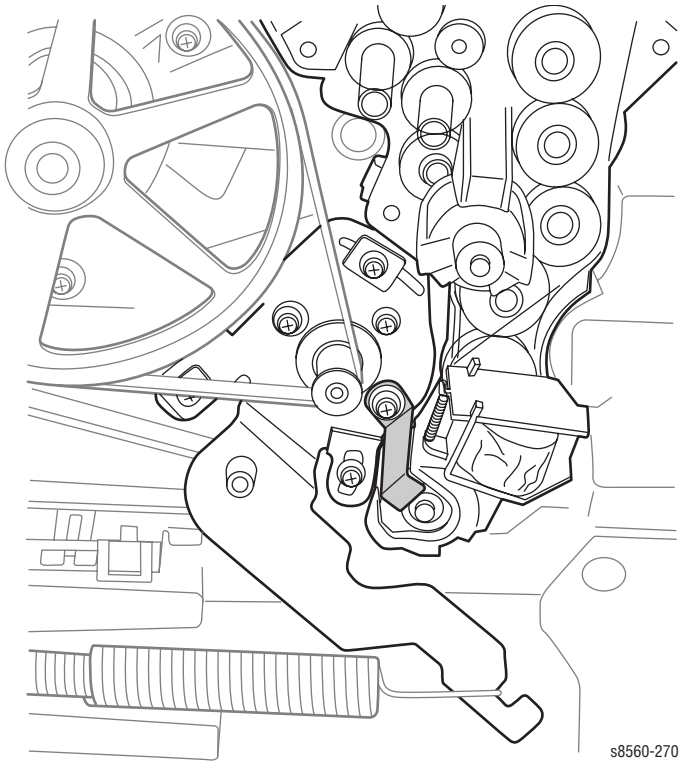
19,003.48: Scale and offset error is too large. The voltages measured have more than a 20% error from their expected values. Something is wrong with the Electronics Module or the Wave Amplifier.

19,004.40: The Printhead and the Electronics Module do not match. Contact escalated Service Support Representative for information to clear fault.

19,005.41: A posssible static discharge from the Pick Clutch to the Electronics Module.Characterized by:

- 19,005.41 error code displayed on the Control Panel
- Printer hangs while printing with the Electronics Module Fan on full
- Low humidity
- Occasional Jam Behind the Front Cover messages, usually accompanied by error 19,005.41 in Fault History

To prevent these discharges, a Grounding Clip (P/N 650442700) was added between the Y-Axis Motor mount and the Pick Clutch. Check that this clip is installed and contacts the metallic portion of the Pick Clutch.



Note

The Grounding Clip is factory installed in later versions of 8500/8550 models and in all 8560 models.

19,005.63: Wave Amplifier overcurrent. This error can occur in too-low humidity environments. Printer self-resets.

Troubleshooting Procedure for Printhead Calibration

Step	Questions and Actions	Yes	No
1	For 19,005.41 errors: Check that the Ground Clip (650442700) is properly installed at the Y-Axis Motor mounting and contacts the metallic portion of the Pick Clutch. Is the Ground Clip properly installed?	Go to Step 2.	Correct or replace the Ground Clip.
2	Check and reseat all wiring to the Printhead. Did this correct the problem?	Complete.	Replace in this order: ■ Printhead ■ Electronics Module

19,0XX.6x Errors - Waveform Program Faults

19,001.68 thru 19,039.61: Waveform Printhead calibration program faults.

a. Reset NVRAM, and then retest.
b. Replace the NVRAM chip.
c. Replace the Printhead.

21,000.69 Errors - Diagnostic Code Version Mismatch

The diagnostic firmware does not match the engine firmware. Update the diagnostic firmware for the printer. If a code updated ROM daughter board is installed on the main board, remove the board so the printer boots using the main board's code and diagnostics.

22,0XX.6x Errors - Jam Codes

For jam codes, "Jam Codes" on page 3-48.

23,0XX.6x Errors - NVRAM Fault

1. Reset NVRAM, and then retest.
2. Replace the NVRAM.

26,0XX.6x Errors - Printing Faults

Reboot the printer if one of these faults occur.

26,962.6x Errors - "Fall Out" Code

Check the previous error in the fault history and troubleshoot that code.

27,0XX.6x Errors - Profile Library

Ensure the ground integrity of the printer (see "Ensuring Ground Integrity" on page 4-65).

29,0XX.6x Errors - Jam Manager

1. Reset NVRAM, and then retest.
2. Replace the NVRAM.

31,0XX.4x Errors - Mechanical Initialization Jam

The Media Drive motor stalled while moving the media path drive train. Look for interference or debris in the paper path. Check/test Media Drive motor.

31,001.40: Mechanical initialization jam fault.

Troubleshooting Procedure for Mechanical Unit Jam

Step	Questions and Actions	Yes	No
1	Check that all the main tray paper path sensor wires are clear of the Take Away Rollers. Are any wires damaged?	Replace the wiring harness.	Go to Step 2.
2	Are the Take Away Rollers dirty, contaminated, or damaged?	Replace the Take Away Rollers.	Go to Step 3.
3	Run the **Paper Path Drive** test. Did the test pass?	Go to Step 5.	Go to Step 4.
4	Run the **Media Drive Motor** test. Does the Media Drive Motor run extremely fast?	Replace the Media Drive Assembly.	Go to Step 5.
5	1. Remove the Media Drive Assembly and manually rotate each paper path roller. 2. Identify any roller that may be binding and causing drag. 3. Repair or replace as necessary. Did this correct the problem?	Complete.	If the path is clear of debris and the rollers rotate normally, replace the Media Drive Assembly.

31,0XX.6x Errors - Program Faults

1. Reset NVRAM, and then retest.
2. Ensure ground integrity for the printer (see “Ensuring Ground Integrity” on page 4-65).

33,0XX.xx Errors - Tray Manager Device Faults

33,001.42: Tray 1 width value too low.

33,002.43: Tray 1 width value too high.

Troubleshooting Procedure for Tray 1

Step	Questions and Actions	Yes	No
1	Check the wiring and connectors from the Front Door to the I/O Board. Are the wires connected properly?	Go to Step 2.	Replace the harness.
2	Run the **Test Tray 1 Width Sensor** test. Did the test pass?	Replace the I/O board.	Replace the Front Door.

34,0XX.xx Errors - Printhead NVRAM Faults

34,001.43: An error occurred while attempting read/write access to the Printhead calibration partition in NVRAM. The Printhead cable may be unplugged.

34,002.44: An error occurred while attempting read/write access to the Printhead ink data partition in NVRAM.

34,003.45: An error occurred while attempting read/write access to the Printhead data partition in NVRAM.

34,004.46: An error occurred while accessing the Printhead NVRAM hardware for the purpose of initialization. The Printhead cable may be unplugged.

Troubleshooting Procedure for Printhead NVRAM

Step	Questions and Actions	Yes	No
1	Check and reseat all wiring to the Printhead. Did this correct the problem?	Complete.	Replace in this order: ■ Printhead ■ Electronics Module

36,000.40 Errors - Drum Maintenance Faults

Troubleshooting Procedure for Drum Maintenance

Step	Questions and Actions	Yes	No
1	Ensure ground integrity (see "Ensuring Ground Integrity" on page 4-65). Did this correct the problem?	Complete.	Go to Step 2.
2	Ensure the Process Drive system is correctly homed as described in "Homing the Process Drive Train" on page 6-8.	Complete.	Go to Step 3.
3	1. Check the Drum Maintenance Pivot Plate for cracks. 2. Check the Drum Maintenance Camshaft rollers for damage or improper movement. 3. If the Drum Maintenance Pivot Plate or cam rollers are faulty, replace. Did this correct the problem?	Complete.	Go to Step 4.
4	Use Service Diagnostics to run the **Drum Maintenance/Transfix Home** test. Use Service Diagnostics to run the **Drum Maintenance Drive** test.	If either test fails, replace the Process Drive.	

36,001.67 Errors - Drum Maintenance Fault

1. Replace the Drum Maintenance Pivot Plate.
2. Replace the Drum Maintenance Kit.

36,002.44 Errors - Drum Maintenance Program Fault

Printer can't write to Drum Maintenance Kit.

1. Ensure the Drum Maintenance Kit sits correctly in the Drum Maintenance Pivot Plate.
2. Replace the Drum Maintenance Kit.
3. Replace the Drum Maintenance Pivot Plate.

37,0XX.xx Errors - PEST Faults

AC power supplied by power sources such as uninterruptible power supplies (UPSs) or DC-to-AC inverter systems may not supply correct voltage to properly power up the printer. Likewise, other devices sharing the same AC circuit can cause AC voltage sags that cause the printer to fail its AC heater PEST tests (Print Engine Self Test). The printer may produce any of the following disconnected heater errors:

- Printhead jet-stack 37,002.47 or 37,003.48

- Reservoir heater, 37,004.40 or 37,005.41
- Drum heater error 37,006.42
- Preheater error 37,008.44
- Ink melters errors 37,009.45 thru 37,013.40

The printer includes several heaters powered by AC. The printer itself can power up despite insufficient or irregular AC voltage but it may fail its AC heater tests. This is due the test not measuring sufficient current flowing through the heater at the moment the test runs.

Devices sharing the printer's AC circuit shared, such as a laser printer, a coffee maker, or a space heater, may be placing heavy intermittent demand on the AC circuit. This sudden inductive demand creates momentary AC voltage sag that causes the PEST test to fail.

Verify the AC power source prior to troubleshooting these errors. For wiring diagrams to aid in diagnosing PEST faults, see "Wiring Diagrams" on page 10-1.

	8400/8500/8550/8560 PEST Description
37,001.46:	**Generic PEST error.** Something went wrong during the PEST process.
37,002.47:	**PEST Error - Printhead Left jetstack disconnect.** The left jetstack is not drawing the expected power from the supply.
37,03.48:	**PEST - Printhead Right jetstack disconnect.** The right jetstack is not drawing the expected power from the supply.
37,004.40:	**PEST - Printhead Reservoir 0 disconnect.** Reservoir 0 is not drawing the expected power from the supply.
37,005.41:	**PEST - Printhead Reservoir 1 disconnect.** Reservoir 1 is not drawing the expected power from the supply.
37,006.42:	**PEST - Drum disconnect.** The Drum heater is not drawing the expected power from the supply.
37,008.44:	**PEST - Preheater disconnect.** The Preheater is not drawing the expected power from the supply.

	8400 PEST Description	8500/8550/8560 PEST Description
37,009.45:	**Inkmelt 0 (Yellow) disconnect.** The inkmelt heater is not drawing the expected power from the supply.	**All ink melters** are disconnected. All ink melters are not drawing the expected power. Check to see if the ink melter's AC cable is connected.
37,010.46:	**Inkmelt 1 (Cyan) disconnect.** The inkmelt heater is not drawing the expected power from the supply.	**Inkmelt 0 (Yellow) disconnect.** The inkmelt heater is not drawing the expected power from the supply.
37,011.44:	**Inkmelt 2 (Magenta) disconnect.** The inkmelt heater is not drawing the expected power from the supply.	**Inkmelt 1 (Cyan) disconnect.** The inkmelt heater is not drawing the expected power from the supply.

	8400 PEST Description	8500/8550/8560 PEST Description
37,012.48:	**Inkmelt 3 (Black) disconnect.** The inkmelt heater is not drawing the expected power from the supply.	**Inkmelt 2 (Magenta) disconnect.** The inkmelt heater is not drawing the expected power from the supply.
37,013.40:		**Inkmelt 3 (Black) disconnect.** The inkmelt heater is not drawing the expected power from the supply.

Troubleshooting Procedure for Heaters

Step	Questions and Actions	Yes	No
1	Check the wiring running from the problem component to the Printhead. Is the wiring damaged?	Replace the wiring harness.	Go to Step 2.
2	Run the appropriate diagnostic test: **37,002.47** = **Left Jetstack Heater** **37,003.48** = **Right Jetstack Heater** **37,004.40**, **37,005.41 = Reservoir Heaters** Did the test pass?		Replace the Printhead.
3	Run the appropriate diagnostic test: **37,006.42** = **Drum Heater** Did the test pass?		Replace the Drum Assembly.
4	Run the appropriate diagnostic test: **37,008.44** = **Preheat Heater** Did the test pass?		Replace the Preheater.
5	Run the appropriate diagnostic test: **37,009.45** = (8500/8550/8560) **All melters** = (8400) **Ink Melt 1** **37,010.46** = (8500/8550/8560) **Ink Melt 1** = (8400) **Ink Melt 2** **37,011.47** = (8500/8550/8560) **Ink Melt 2** = (8400) **Ink Melt 3** **37,012.48** = (8500/8550/8560) **Ink Melt 3** = (8400) **Ink Melt 4** **37,013.48** = (8500/8550/8560) **Ink Melt 4** Did the test pass?		Replace the Ink Loader.

	8400 PEST Description	8500/8550/8560 PEST Description
37,013.40:	**Electronics module cooling fan disconnect.** The electronics cooling fan is not drawing the expected power from the supply.	

	8400 PEST Description	8500/8550/8560 PEST Description
37,014.41:	**Drum Fan disconnect.** The Drum Fan is not drawing the expected power.	**Electronics Module Fan Disconnect.** The Electronics Module Fan is not drawing the expected power.
37,015.42:		**Drum Fan disconnect.** The Drum Fan is not drawing the expected power.

Troubleshooting Procedure for Fans

Step	Questions and Actions	Yes	No
1	Run the appropriate diagnostic test: **37,013.40** = (8400) **Electronics Fan** **37,014.40** = (8500/8550/8560) **Electronics Fan** **37,014.41** = (8400) **Drum Fan** **37,015.41** = (8500/8550/8560) **Drum Fan** Did the test pass?	Go to Step 2.	Go to Step 2.
2	Check the wiring for the problem fan. Is the wiring damaged?	Replace the harness.	Replace the fan.

	8400 PEST Description	8500/8550/8560 PEST description
37,016.43:	**PEST 50 V power supply test.** For Phaser 8400 printers, the 50 V power supply is loaded with the Head Maintenance clutch, and then tested.	**50 V power supply test.** The power supply is loaded with the Head Maintenance, Deskew, and the Pick Clutches. Check the 50 V on the Power supply. Or, ensure that the cables are not plugged into any of the clutches. The expected power from the supply is not being drawn. This error may be caused by a power supply that is faulty or shorted by some other 50 V device. Check the 50 V on the Power supply. Or, ensure that the cables are not plugged into the clutch.

50V Power Supply Fault Troubleshooting Procedure

Step	Questions and Actions	Yes	No
1	Check for a short in the Electronics Module. **NOTE** Damage to circuits within the Electronics Module may occur if the power supply capacitors are not allowed to fully discharge. **NOTE** It is possible that the power supply is not shorted, but instead is out of spec and can lead to an error condition. 1. Measure the 50 V power supply output. The test point is located on the power control board below the main board RAM DIMMs. 2. Is the power supply within specification? 3. Turn Off the printer and wait 30 seconds for the capacitors to discharge.	Go to Step 2.	Go to Step 2.
2	1. Unplug the following Electronics Module connectors. This step disconnects all other external circuits so the Electronics Module can be tested alone: ■ Power Control to I/O board (J800 - gray ribbon cable on right side) ■ Power Control right (J400 – 16 wire, multi-color) ■ Printhead data interface (J130 – gray ribbon cable on top side) ■ Wave amp signal (J790) short gray ribbon cable located on left side) ■ Printhead power connector ■ Power Control left (J390 – 34 wire, multi-color) ■ Y-Axis motor (J280) 2. Turn on power to the printer. Do the PE and PS indicators (near the power switch) flash momentarily?	Go to Step 3.	Replace the Electronics Module.
3	1. Turn off the printer and wait 30 seconds for power supply capacitors to discharge. 2. Plug in the power control to I/O board connector (J800). 3. Turn on power to the printer. Do the PE and PS indicators flash momentarily?	Go to Step 4.	Go to Step 5
4	If the 50V Power Supply LED (viewed thru the cooling grill below the power cord receptacle) illuminates, the short is on one of the external devices you unplugged earlier. In this case, systematically turn off the printer, plug a wiring harness back in, and turn the printer on until the 50V supply fails (see “Measuring DC Power Supply Voltages” on page 65). Replace the defective part. Retest the printer.		

50V Power Supply Fault Troubleshooting Procedure (Continued)

Step	Questions and Actions	Yes	No
5	To isolate the problem to the I/O Board or its related cabling, unplug these I/O Board connectors. ■ Umbilical Right J1 ■ Waste Tray Sense J110 ■ Stripper Solenoid J250 ■ Paper Tray Sense J610 ■ Ink load Signal J910 ■ DMU Sense J860 ■ Drum Thermistor J870 ■ Exit Module J680 ■ Heater Relay Control J950 Test the resistance of the I/O board to Pin1 of J270. Is the resistance still less than 1K ohm?	Replace the I/O Board.	Go to Step 6.
6	1. Plug in the I/O Board connectors one at a time and retest the resistance. 2. Replace components until you find one that creates a short at J270, Pin 1. Find any shorted components?	Leave power on to ensure the problem is fixed.	Go to Step 7.
7	Connect the Wave Amp. Any problems?	Leave power On to ensure the problem is fixed.	Go to Step 8.
8	Connect the Printhead.	Apply power and retest.	Complete.

	8400 PEST Description	8500/8550/8560 PEST description
37,017.44:	**Deskew Clutch Disconnect.** The Deskew Clutch is not drawing the expected power.	**Head Maintenance Clutch Disconnect.** The Head Maintenance Clutch is not drawing the expected power.
37,018.45:	**Main Tray Pick Clutch disconnect.** The Main Tray Pick Clutch is not drawing the expected power.	**Main Tray Deskew Clutch Disconnect.** The Main Tray Deskew Clutch is not drawing the expected power.
37,019.46:	**Tray 1 Pick Solenoid Disconnect.** The tray 1 Pick Solenoid is not drawing the expected power.	**Main Tray Pick Clutch Disconnect.** The Main Tray Pick Clutch is not drawing the expected power.
37,020.47:	**Strip Solenoid disconnect.** The strip solenoid is not drawing the expected power.	**Tray 1 Pick Solenoid Disconnect.** The Tray 1 Pick Solenoid is not drawing the expected power.
37,021.48:		**Strip Solenoid disconnect.** The Strip Solenoid is not drawing the expected power from the supply.

	8400 PEST Description	8500/8550/8560 PEST description
37,022.40:		**Preheat Solenoid Disconnect**. The Preheat Solenoid is not drawing the expected power from the supply.
37,023.41:		**Head Tilt Solenoid Disconnect.** The Head Tilt Solenoid is not drawing the expected power from the supply.

Solenoid or Clutch Troubleshooting Procedure

Step	Questions and Actions	Yes	No
1	Run the appropriate diagnostic test: ■ **37,017.44** = **Head Maintenance Clutch** ■ **37,018.45** = **Deskew Clutch** ■ **37,019.46** = (8500/8550/8560) **Main tray pick Clutch** ■ **37,019.46** =(8400) **Pick Solenoid** ■ **37,020.47** = (8500/8550/8560) **Multipurpose Pick Solenoid** ■ **37,020.47** = (8400) **Strip Solenoid** ■ **37,021.48** = (8500/8550/8560) **Strip Solenoid** ■ **37,022.40** = (8400) **Preheat Solenoid** ■ **37,023.41** = (8500/8550/8560) **Head Tilt Solenoid** Did the test pass?	Go to Step 3.	Go to Step 2.
2	Check the wiring for the affected clutch or solenoid. Is the wiring damaged?	Replace the harness.	Replace the affected component.

8400	8500/8550/ 8560	PEST Description
37,021.48:	37,024.48:	**Tray 1 elevator disconnect.** The main tray elevator is not drawing the expected power from the supply.

Troubleshooting Procedure

Step	Questions and Actions	Yes	No
1	Run the **Tray 2 Lift Motor** test. Did the test pass?	Replace the Electronics Module.	Go to Step 2.
2	Check the wiring to the Tray 2 Lift Motor. Is the wiring damaged?	Replace the wiring harness	Replace the Tray Lift Motor.

8400	8500/8550/ 8560	8400 PEST Description
37,022.40:	37,025.43:	**Pressure pump motor disconnect.** The Purge Pump is not drawing the expected power.

Troubleshooting Procedure for Purge Pump

Step	Questions and Actions	Yes	No
1	Run the **Pressure Pump Motor** test. Did the test pass?	Replace the Electronics Module.	Go to Step 2.
2	Check the Purge Pump wiring. Is the wiring damaged?	Replace the Purge Pump.	

8400	8500/8550/ 8560	PEST Description
37,023.41:	37,026.44	**Purge valve disconnect.** The purge valve is not drawing the expected power from the supply.

Troubleshooting Procedure for Purge Valve

Step	Questions and Actions	Yes	No
1	Run the **Purge Vent Solenoid** test. Did the test pass?	Go to Step 2.	Replace the Purge Pump.
2	Check the Purge Pump wiring. Is the wiring damaged?	Replace the defective wiring or the Purge Pump.	

8400	8500/8550/ 8560	PEST Description
37,024.42:	37,027.45:	**Drum Heater Relay Board disconnect.** Both Drum heater relay coils are not drawing the expected power.
37,025.43:	37,028.46:	**Drum heater relay A disconnect.** The Drum heater A coil is not drawing the expected power from the supply.
37,026.44:	37,029.47:	**Drum heater relay B disconnect.** The Drum heater B coil is not drawing the expected power from the supply.

Troubleshooting Procedures for Drum Heater Relay Board

Step	Questions and Actions	Yes	No
1	Run the **Drum Heater Relay** test. Did the test pass?	Replace the Electronics Module.	Go to Step 2.
2	Check the wiring for damage.	Replace the Drum Heater Relay Board.	

8400	8500/8550/ 8560/8560	PEST Description
37,027.45:	37,030.48:	**X-Axis Motor disconnect.** The X-Axis motor is not drawing the expected power.
37,028.46:	37,031.40:	**X-Axis Motor disconnect.** The X-Axis motor (first phase) is not drawing the expected power.
37,029.47:	37,032.41:	**X-Axis Motor short.** The X-Axis motor is drawing too much power.
37,030.48:	37,033.42:	**X-Axis Motor disconnect**. The X-Axis motor (second phase) is not drawing the expected power.
37,031.40:	37,034.43:	**X-Axis Motor short.** The X-Axis motor is drawing too much power.

Troubleshooting Procedure for X-Axis Motor

Step	Questions and Actions	Yes	No
1	Run the **X-Axis Drive** test. Did the test pass?	Replace the Electronics Module.	Go to Step 2.
2	Check the X- Axis Motor wiring.	Replace the X-Axis Motor.	

8400	8500/8550/ 8560	PEST Description
37,032.41:	37,035.44:	**Y-Axis Motor disconnect.** The Y-Axis motor is not drawing the expected power.
37,033.42:	37,036.45:	**Y-Axis Motor short.** The Y-Axis motor is drawing too much power.

Troubleshooting Procedure for Y-Axis Motor

Step	Questions and Actions	Yes	No
1	1. Remove any obstructions interfering with Drum rotation. 2. Inspect the Drum and ensure the Drum rotates smoothly, if not replace the Drum Assembly and retest. Did this correct the problem?	Complete.	Go to Step 2.
2	Disconnect the Y-Axis Belt. Does the Y-Axis Motor shaft rotate smoothly?	Go to Step 3.	Replace the Y-Axis Motor.
3	1. Reconnect the Y-Axis Belt. 2. Run the **Y-Axis Motor** test. Did the test pass?	Replace the Electronics Module.	Go to Step 4.
4	Check the wiring for damage.	Replace the Y-Axis motor.	

8400	8500/8550/ 8560	PEST Description
37,034.43:	37,037.46:	**Media Drive motor disconnect.** The Media Drive is not drawing the expected power.
37,035.44:	37,038.47:	**Media Drive motor short.** The Media Drive is drawing too much power.

Troubleshooting Procedure for Media Drive

Step	Questions and Actions	Yes	No
1	Run the **Media Path Motor** test. Did the test pass?	Replace the Electronics Module.	Go to Step 2.
2	Check the wiring for damage.	Replace the Media Drive Assembly.	

8400	8500/8550/ 8560	PEST Description
37,036.45:	37,039.48:	**Process motor disconnect.** The Process Drive is not drawing the expected power.
37,037.46:	37,040.40:	**Process motor short.** The Process Drive is drawing too much power.

Troubleshooting Procedure for Process Drive

Step	Questions and Actions	Yes	No
1	Do the Process Drive gears, Transfix Camshaft, and Drum Maintenance Camshaft rotate freely?	Go to Step 2.	Look for drag in the rollers or replace the Process Drive.
2	Run the **Process Motor** test. Did the test pass?	Replace the Electronics Module.	Go to Step 3.
3	Check the wiring for damage.	Replace the Process Drive.	

	8400 PEST Description	8500/8550/8560 PEST Description
37,038.47:	The power supply did not reset properly. Reset may be disconnected.	
37,039.48:	Power supply +5 volt over limit.	
37,040.40:	Power supply +5 volt under limit.	
37,041.41:	Power supply +1.8 volt over limit.	The power supply did not reset properly. Reset may be disconnected.
37,042.42:	Power supply +1.8 volt under limit.	
37,043.43:	Power supply +2.5 volt over limit.	Power supply +2.5 volt over limit.
37,044.44:	Power supply +2.5 volt under limit.	Power supply +2.5 volt under limit.
37,045.45:	Power supply +3.3 volt over limit.	Power supply +3.3 volt over limit.
37,046.46:	Power supply +3.3 volt under limit.	Power supply +3.3 volt under limit.
37,047.47:	Power supply +12 volt over limit.	Power supply +12 volt over limit
37,048.48:	Power supply +12 volt under limit	Power supply +12 volt under limit
37,049.40:	Power supply -12 volt over limit.	Power supply -12 volt over limit.
37,050.41:	Power supply -12 volt under limit.	Power supply -12 volt under limit.
37,051.42:	Power supply current over limit.	Power supply current over limit.
37,052.43:	Power supply current under limit.	Power supply current under limit.
37,053.44:	Power supply +50 volt over limit.	Power supply +50 volt over limit.
37,054.45:	Power supply +50 volt under limit.	Power supply +50 volt under limit.
37,055.46:	Power supply -50 volt over limit.	Power supply -50 volt over limit.

	8400 PEST Description	8500/8550/8560 PEST Description
37,056.47:	Power supply -50 volt under limit.	Power supply -50 volt under limit.
37,057.48:	Power supply +15 volt over limit.	Power supply +15 volt over limit.
37,058.40:	Power supply +15 volt under limit.	Power supply +15 volt under limit.
37,059.41:	Power supply -15 volt over limit.	Power supply -15 volt over limit.
37,060.42:	Power supply -15 volt under limit.	Power supply -15 volt under limit.
37,061.43:	Power supply high switch will not activate. 12, 15, and 50 volt missing. This may be due to a short or disconnected power supply reset line.	Power supply +5 volt over limit.
37,062.44:	Vss measurement too low. The Printhead power cable may be disconnected. **NOTE** Later version Printheads feature a lock connector on the printhead data cable	Power supply +5 volt under limit.
37,063.45:	Vpp measurement too low. The Printhead power cable may be disconnected. **NOTE** Later version Printheads feature a lock connector on the printhead data cable	Power supply high switch will not activate. 12, 15, and 50 volt missing. This may be due to a short or disconnected power supply reset line.
37,064.46:		Vss measurement too low. The Printhead power may be disconnected.
37,065.47:		Vpp measurement too low, Printhead power may be disconnected. Wave amp drive cable may be damaged or disconnected at head driver board or wave amp board.
37,066.48:		The Wave Amp may be shorted. Check the Wave Amp drive cable (lifted ends of conductors).

Troubleshooting Procedure for Power Supply

Step	Questions and Actions	Yes	No
1	Run the **Voltages** check test. Did the test pass?	Go to Step 2.	Replace the Electronics Module.
2	Check the Printhead power cable. Is the wiring damaged or not connected?	Reseat or replace the wiring.	Replace the Wave Amp.